Brahminy Kites Haliastur indus fishing with Irrawaddy dolphins Orcaella brevirostris in the Mekong River

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Although the Brahminy Kite *Haliastur indus* is a widespread and often relatively common species in coastal areas and near rivers (BirdLife International 2009), relatively little attention has been paid to the species's feeding ecology (Iqbal *et al.* 2009). Brahminy Kites are reported as catholic feeders with a diet of fish and opportunistic take of other small vertebrates, and often carrion (e.g. Irby 1861, Strange 2002, Robson 2005, Davidson 2009). Few studies, however, report specific details of the species's diet, and much understanding of the species's foraging strategy appears to be based on diffuse casual observation by many observers throughout its range.

Fishing in association with dolphins is well known for diving seabirds (e.g. Evans 1982, Ballance *et al.* 1997). Generally this involves birds taking advantage of groups of dolphins herding large schools of fish within diving range, near the surface. In rivers, such association between birds and dolphins appears to be much rarer. There are, to the best of my knowledge, no records of birds fishing with freshwater dolphins, or of accipitrids fishing with dolphins. Here I report on incidental observations of Brahminy Kites fishing in association with Irrawaddy dolphins *Orcaella brevirostris* in the Mekong River, in north-eastern Cambodia.

Methods

Observations of kites feeding around dolphins were made opportunistically on surveys for Irrawaddy dolphins on the Mekong River from 2009 to 2012. Dolphin surveys covered the area between Kratie town to the Lao PDR border and back, a direct linear distance of 190 km north—south (Ryan et al. 2011). Within the study area the river morphology consists of complex braided channel mosaic with a wide variety of habitats ranging from shallow rocky rapids to deep pools that provide important habitat for fish and dolphins (Poulsen et al. 2002). High levels of avian and biological diversity are reported in the area, which includes a Ramsar site in the northern end; Try & Chambers (2006) and Bezuijen et al. (2008) provide extensive overviews of the northern and southern halves of the study area, in which Brahminy Kites are commonly observed.

Surveys consisted of slow travel in a traditional-style wooden boat, traversing the river for signs of dolphins (details in Ryan *et al.* 2011). The observations reported are from seven surveys between March 2009 and February 2012, each taking around ten days. Irrawaddy dolphins can move throughout most of the main channel, but congregate around deep pools in the dry season. Consequently, a large proportion of observation time is spent around deep pool areas. Attempts were made to take careful notes of the birds' behaviour at such times, but my priority activity of photographing dolphins limited the extent of my attention.

Results

Three observations of Brahminy Kites fishing in association with Irrawaddy dolphins were made: in April 2009, March 2010 and February 2012. All of these observations were of a single bird, and occurred at Kampi pool, the southernmost end of the dolphin's range, around 14 km north of Kratie town, in Kratie province.

In 2009 the kite spent around 20–30 minutes following a group of 4–6 feeding dolphins. The bird circled slowly around the area where the dolphins fed and swooped down to the water surface at the same time as, and very near to where, the dolphins surfaced. At least four such dives were observed, two of which broke the water surface but neither of which was successful in catching fish. The bird eventually moved on for no apparent reason, while the dolphins continued to fish in the same area.

The 2010 observations were similar although less detail was recorded. The kite appeared to fish around a small group of dolphins, following them around the local area and swooping at least three times near surfacing dolphins. Again, no successful swoops were observed and the encounter is thought to have lasted around 10–15 minutes.

In 2012 the kite was observed to follow a group of socialising and feeding dolphins for around 50 minutes. The mammals were in a deep area, and large numbers of small fish, believed to be a common cyprinid of the genus *Henicorhynchus*, known as *trey riel* in Cambodian, intermittently broke the surface. The bird was observed to swoop abortively, without touching the surface, at least six times, and broke the water surface at least four times over this period, two of which were very near surfacing dolphins. The bird disappeared around the time the dolphins moved to feed in another area, suggesting the fish being targeted by both species had moved on.

Discussion

These observations are potentially the first record of a Brahminy Kite using dolphins to find prey, and at the least a rare report of an accipitrid fishing with dolphins. The scarcity of such observations, compared to the hundreds of hours of observation I made of dolphins throughout this period, suggests that the mode of feeding is not a common one. Indeed, that all observations occurred at a similar time of year and at the same location suggests it may even be the same individual observed each time. In fact, given the concentrations of both dolphins and fish in deep pools throughout the dry season (Poulsen et al. 2002), piscivorous birds would sometimes occur in close proximity to Irrawaddy dolphins in the Mekong simply by chance. For example, in January 2012 an Osprey Pandion haliaetus was also observed slowly circling a group of around six dolphins at Anlung Cheuteal, a deep pool on the border of Cambodia and Lao People's Democratic Republic. The bird appeared to follow the dolphins for around five minutes without swooping, before continuing across the pool searching. Observations of other avian species feeding independently of, but near to, dolphins in areas of high prey density have been recorded elsewhere (Acevedo 1991). This is probably the case regarding the Osprey observation. However, that the Brahminy Kites were observed to begin to dive just before dolphins appeared at the surface strongly suggests an association in their foraging strategy, probably related to dolphins chasing fish toward the surface. This pattern fits similar observations where White-fronted Terns Sterna striata were observed to follow single dolphins and feed around them (Brager 1998). As Brahminy Kites are reported to use a wide variety of food resources, it is unsurprising that they may take this opportunity when it arises, and thus this behaviour is likely to be some form of facultative commensalism.

It would be of interest to understand better such interactions between birds and riverine dolphins, including the extent and frequency of feeding associations, and the species that may be involved. Better knowledge of these unusual events could also be used as an ecotourism drawcard to support the conservation of the species in question.

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New information on the distribution of White-fronted *Microhierax latifrons* and Black-thighed Falconets *M. fringillarius* in Kalimantan, Indonesia

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The White-fronted Falconet *Microhierax latifrons* is well-known as the near-endemic falconet in Sabah (Ferguson-Lees & Christie 2001, Sheldon *et al.* 2001, Mann 2008). Although it is a forest-edge species, it is listed as Near Threatened owing to its restricted range and reliance on lowland forests coupled with the likely decline and degradation of these habitats (BirdLife International 2012). To the west and south of its range, its congener the Black-thighed Falconet *M. fringillarius* occupies the remaining, larger part of the island of Borneo.

During a biodiversity survey in East Kalimantan (Indonesian territory), on 1 June 2011, at 08h15 to 08h20, MI saw two individuals of male White-fronted Falconet in the Simenggaris area of Nunukan

Regency, East Kalimantan Province, Indonesia (4°27′N 117°16′E; Figure 1). This site is located c.20 km south by the main road to the border between Indonesia and Sabah (Malaysia).

The falconets had white forecrowns extending to above the rear end of their eyes, plain black upperparts, underparts white from throat to breast, tawny-coloured belly, black flanks and undertail (Plate 1). They were easily distinguished from Black-thighed Falconet by an unbarred blackish undertail, no curved white line behind the eyes and a tawny rather than rufous abdomen. When first spotted, the falconets were perched on the top of a c.20 m tall snag along a logging road through secondary forest. One bird was eating a cicada while the other watched for flying prey insects (Plate

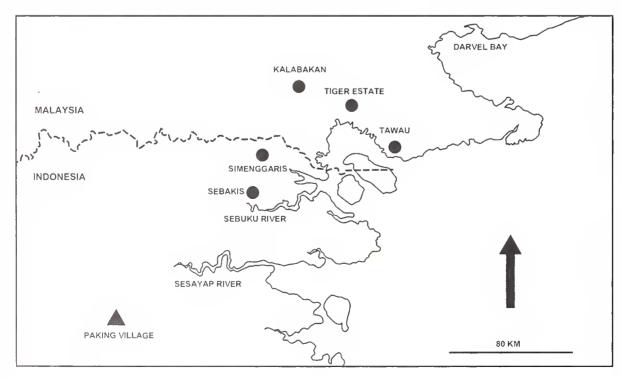


Figure 1. Localities of records of White-fronted Falconet *Microhierax latifrons* (dots) and Black-thighed Falconet *M. fringillarius* (triangle).